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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,529	10/23/2003	Yoshinori Endo	117579	9108
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			EXAMINER QIN, YIXING	
			ART UNIT 2625	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/690,529

Applicant(s)

ENDO, YOSHINORI

Examiner

Yixing Qin

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/13/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 rejected under 35 U.S.C. 102(e) as being anticipated by Hashimoto (U.S. Patent No. 6,407,826)

Regarding claim 1, Hashimoto discloses an image forming device connected to an external device, the image forming device comprising:

an image forming unit forming images on a recording medium; (abstract)

a reception unit receiving a reset signal transmitted from an external device;

(Fig 2)

a reset process unit executing a reset process to reset the image forming unit;
(column 9, lines 40-67. Also note in column 4, lines 21-23 that CPRDY is a signal that indicates that the external apparatus (e.g. a computer) is ready to communicate)
and

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a reset process control unit selectively controlling the reset process unit to execute the reset process in a manner that the reset process control unit controls, during a reset signal valid mode, the reset process unit to execute the reset process upon receipt of the reset signal (column 10, lines 1-4 - the wakeup is the reset valid mode) and that the reset process control unit ignores, during a reset signal invalid mode, input of the reset signal, and fails to control the reset process unit to execute the reset process. (column 9, line 60 – column 10 line 10 - the reset invalid mode is when the printer is in the sleep mode 0 or 1)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto

(U. S. Patent No. 6,407,826)

Regarding claim 2, Hashimoto discloses an image forming device according to claim 1, further comprising:

Hashimoto does not explicitly disclose "a selecting unit enabling a user to select one mode from among the reset signal valid mode and the reset signal invalid mode; "

However, Hashimoto discloses in column 9, line 24-56 that a user intending for the printer to reset and warmup would push a test print button. The printer is shifted from the sleep to the stand by to the print modes according to this user input.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have had a selection of whether a reset is to occur.

The motivation would have been to allow user control in selecting when to reset a printer.

Therefore, it would have been obvious to improve Hashimoto's invention to obtain the invention as specified.

a reset signal valid mode setting unit judging, when the reception unit receives the reset signal, whether or not the user has selected the reset signal valid mode, and setting the reset process control unit into the reset signal valid mode when the user has selected the reset signal valid mode; (column 9, line 24-56) and

a reset signal invalid mode setting unit judging, when the reception unit receives the reset signal, whether or not the user has selected the reset signal invalid mode,

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and setting the reset process control unit into the reset signal invalid mode when the user has selected the reset signal valid mode. (column 9, line 24-56)

Claims 3-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto (U. S. Patent No. 6,407,826) in view of Kataoka (U.S. Patent No. 5,602,975)

Regarding claim 3, Hashimoto discloses an image forming device according to claim 2, further comprising:

The Hashimoto reference discloses that a printer can enter a sleeping mode, but does not go into details as to how.

It does not explicitly disclose "a sleep mode control unit bringing the image forming unit into a sleep mode when no print job is inputted within a prescribed time after the image forming unit has completed a printing process, the image forming unit being capable of receiving a print job during the sleep mode and consuming power less than while the image forming unit is executing a printing process;"

However, Kataoka discloses in column 6, line 60 to column 7, line 4 and column 3, lines 12-43 that the printer can be put into a sleep mode and woken up by reception of print data.

Hashimoto and Kataoka are combinable because both are in the field of saving power on a printer.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the criteria for entering a sleep mode of Kataoka in the Hashimoto invention.

The motivation would have been to provide a reasonable scenario as to when to power down the printer for saving energy.

Therefore, it would have been obvious to combine Hashimoto and Kataoka to obtain the invention as specified.

and a sleep-mode judging unit judging, when the reception unit receives the reset signal, whether or not the image forming unit is being in the sleep mode. (Fig. 6 of Hashimoto shows the various states that the printer can be in)

Regarding claim 4, Hashimoto discloses an image forming device according to claim 3, wherein when the sleep-mode judging unit determines that the image forming unit is being in the sleep mode, the reset process control unit in the reset signal valid mode controls the sleep mode control unit to cancel the sleep mode and controls the reset process unit to execute the reset process (Fig. 26 – column 11, lines 54-67), and wherein when the sleep-mode judging unit determines that the image forming unit is being in the sleep mode, the reset process control unit in the reset signal invalid mode controls the sleep mode control unit to fail to cancel the sleep mode and the reset process unit to fail to execute the reset process. (column 9, line 66 – column 10, line 10)

Regarding claim 5, Hashimoto discloses an image forming device according to claim 4, further comprising an auto-select mode setting unit setting, when the reception unit receives the reset signal, the reset process control unit into either one of the reset signal valid mode and the reset signal invalid mode automatically dependently on the determined results of the sleep-mode judging unit. (column 10, lines 13-18 discloses that one can set an automatic wake-up mode)

Regarding claim 6, Hashimoto discloses an image forming device according to claim 5, wherein the auto-select mode setting unit sets the reset process control unit into the reset signal valid mode when the sleep-mode judging unit determines that the image forming unit is not in the sleep mode (column 6, lines 40-52), the auto-select mode setting unit setting the reset process control unit into the reset signal invalid mode when the sleep-mode judging unit determines that the image forming unit is in the sleep mode. (column 9, line 6-10)

Regarding claim 7, Hashimoto discloses an image forming device according to claim 2, further comprising an auto-select mode setting unit setting the reset process control unit into either one of the reset signal valid mode and the reset signal invalid mode automatically dependently on an operation state of the image forming unit (column 10, lines 13-18 discloses that one can set an automatic wake-up mode), wherein the selecting unit enables the user to select one mode from among the reset signal valid mode, the reset signal invalid mode, and the auto-select mode, the selecting unit enabling the auto-select mode setting unit to perform its setting operation when the user has selected the auto-select mode. (column 10, lines 13-18)

Regarding claim 8, Hashimoto discloses an image forming device according to claim 7, wherein the auto-select mode setting unit judges whether the image forming unit is in a sleep mode when the reception unit receives the reset signal (column 6, lines 40-52), the auto-select mode setting unit setting the reset process control unit into the reset signal valid mode when the image forming unit is not in the sleep mode, the auto-select mode setting unit setting the reset process control unit into the reset signal invalid mode when the image forming unit is in the sleep mode. (column 9, line 6-10)

Regarding claim 9, Hashimoto discloses an image forming device according to claim 1, further comprising:

a selecting unit enabling the user to select one mode from among at least two of the reset signal valid mode, the reset signal invalid mode, and an auto-select mode; (column 9, line 24-56)

a display unit displaying results of the user's selection attained by the selecting unit; (the secondary reference, Kataoka discloses this in column 2, line 15-26)

a mode setting unit executing a setting operation when the reception unit receives the reset signal, the mode setting unit setting the reset process control unit into the reset signal valid mode when the user has selected the reset signal valid mode, setting the reset process control unit into the reset signal invalid mode when the user has selected the reset signal invalid mode, and setting the reset process

control unit into the auto-select mode when the user has selected the auto-select model; (column 9, line 24-56) and

a sleep-mode judging unit judging, when the reset process control unit is set into the auto-select mode, whether the image forming unit is in a sleep mode, and setting the reset process control unit in the auto-select mode into the reset signal valid mode when the image forming unit is not in the sleep mode and setting the reset process control unit in the auto-select mode into the reset signal invalid mode when the image forming unit is in the sleep mode. (column 10, lines 13-18 discloses that one can set an automatic wake-up mode)

Regarding claim 10, Hashimoto discloses an image forming device according to claim 1, wherein the reception unit receives the reset signal from the external device at least when power to the external device is turned on. (Fig. 1, column 4, lines 9-14 - the computer would have to be turned on in order to send a signal to the printer)

Regarding claim 11, Hashimoto discloses an image forming device according to claim 1, further comprising a warm-up process unit executing a warm-up operation for controlling the image forming unit to perform preparation operation for the printing process; (Fig. 19, column 18, line 65 - column 19, line 5)

wherein the reset process unit executes as the reset process a print data initialization process for initializing print data (column 13, lines 14-39), a print settings data initialization process for initializing print settings data, and a warm-up operation

initiation process for directing the warm-up process unit to begin a warm-up operation. (Fig. 6)

Regarding claim 12, Hashimoto discloses an image forming device according to claim 1, wherein the reception unit receives the reset signal, which is transmitted from the external device via a parallel interface cable. (Fig. 1, item 30)

Regarding claim 13, Hashimoto discloses an image forming device according to claim 1, wherein the reception unit includes:

a parallel interface port capable of connecting to the parallel interface cable; (Fig. 1, item 30) and

a network port capable of connecting to a network cable; (column 4, lines 9-14) and

further comprising a reset signal invalid mode auto-select unit automatically setting the reset process control unit into the reset signal invalid mode when the parallel interface cable is connected to the parallel interface port and the network cable is connected to the network port. (column 10, lines 13-19)

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yixing Qin whose telephone number is (571)272-7381. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Lamb can be reached on (571)272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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